

PEKHOV, A.P.

Ultrastructure of bacteria. Vest. AMN SSSR 15 no. 5:43-54 '60.
(MIR 14:2)

1. Institut eksperimental'noy biologii AMN SSSR.
(BACTERIA)

PEKHOV, A. P.

Doc Biol Sci - (diss) "Structural-functional analysis of the interaction of phages and bacteria." Saratov, 1961. 37 pp; (Ministry of Public Health USSR, All-Union Scientific Research Institute "Mikrob"); 275 copies; price not given; list of author's works on pp 35-37 (18 entries); (KL, 5-61 sup, 182)

PEKHOV, A., doktor biologicheskikh nauk

Vanishing boundaries of the invisible. IUn.tekh. & no.11:20-23
N '61. (MIRA 14:11)

(ELECTRON) (MICROSCOPE)

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S/560/61/000/011/007/012
E027/E635

AUTHORS:

Zhukov-Verezhnikov, N.N., Mayskiy, I.N.,
Yazdovskiy, V.I., Pekhov, A.P., Gyurdzhian, A.A.
Nefed'yeva, N.P., Kapichnikov, M.M., Podoplelov, I.I.,
Rybakov, N.I., Klemparskaya, N.N., Klimov, V.Yu.,
Novikov, S.N., Novikova, I.S., Petrov, R.V.,
Sushko, N.G., Ugryumov, Ye.P., Fedorova, G.I.,
Zakharov, A.F., Vinogradova, I.N., Chamova, K.G.,
and Buyko, Ye.A.

TITLE:

The results of the first microbiological and
cytological experiments in Space in Earth satellites

SOURCE:

Akademiya nauk SSSR. Iskusstvennyye sputniki Zemli.
no. 11. Moscow, 1961. Rezul'taty nauchnykh
issledovaniy, provedennykh vo vremya poletov vtorogo
i tret'ego kosmicheskikh korabley-sputnikov, 44 - 67

TEXT:

The authors report the results of their investigations
of biological objects which had been exposed to space conditions
in satellite vehicles. The first part of the work was devoted
to a study of the survival of cells of differing levels of
organisation under the influence of radiation and other
Card 175

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S/560/61/000/011/007/012
E027/E635

The results of the ---

unfavourable factors, in comparison with control materials which remained in the laboratory over the same period. In experiments with bacteria 2ml. samples of suspensions of *Escherichia coli*, *Aerobacter aerogenes*, *Staphylococcus aureus* and *Clostridium butyricum* containing 500 million organisms or spores per ml. were sealed in ampoules, and exposed to a space flight of unstated duration; the number of viable individuals after the exposure did not differ significantly from the values for the control samples. A similar experiment was carried out with the T2 phage of *E. coli* and the 1521 phage of *A. aerogenes*, which were sent in the second satellite; again, no significant reduction in the titre of the phage preparations could be detected after return from space. Similar results were obtained with preparations of phage sent into space in the fourth and fifth satellites. Two bottles and six tubes of HeLa cells, some of which were saturated with oxygen, were exposed to space flight

Card 2/5

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E027/E635

The results of the . . .

conditions, after it had first been shown that vibration and acceleration did not detach the cells from the glass. The cultures without oxygen appeared normal on return, whereas in those exposed to oxygen most of the cells had degenerated. Subculture showed that 90% of the cells, whether detached from or remaining on the glass, were dead; however, two tubes gave good growth, and the cells which grew up showed no abnormalities of morphology. No antigenic differences could be detected in the cells in anaphylaxis and desensitization experiments in guinea-pigs. In subsequent space flights fibroblast and human amnion cell cultures were studied, with similar results. Pieces of human and rabbit skin were also used. On August 12th 1960 two pieces of skin 2.5 x 3.5 cm. in size and 0.5 mm. thick were taken from a human donor, placed in Hanks solution and sent into space in the second satellite. On recovery they were regrafted on the original site in the donor and became firmly attached after seven days.

Card 3/5

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The results of the ---

S/560/61/000/011/007/012
E027/E635

Similar results were obtained with two other donors. An apparatus was devised for making a subculture in space, in order to study the ability of bacteria to multiply under space conditions. In experiments with *Glostridium butylicum* no deviations from the controls were observed. The second part of the work was devoted to a study of possible genetic effects brought about by exposure to space conditions, mainly by looking for the production of auxotrophic mutants and lysogeny in bacteria. The former were detected by inoculation on a layer of minimal medium which was then covered with an overlay of the same medium in order to fix the colonies. When the latter had grown up their position was noted and an overlay of complete medium was then put on, and the colonies which then grew up as a result of the diffusion of essential nutrients were selected as auxotrophic mutants. No such mutants could be found in suspensions of *Escherichia coli* recovered from the second satellite. The experiments on the induction of lysogenic bacteria were carried out on a strain of *E. coli* lysogenized by a λ phage which had been exposed to cosmic

Card 4/5

ZHUKOV-VEREZHNIKOV, N.N.; MAYSKIY, I.N.; YAZDOVSKIY, V.I.; PEKHOV, A.P.;
GYURDZHIAN, A.A.; RYBAKOV, N.I.; ANTIPOV, V.V.

Microbiological and cytological studies in spaceships. Probl.
ksom.biol. 2:140-148 '62. (MIRA 16:4)
(SPACE BIOLOGY)

ZHUKOV-VEREZHNICKOV, N.N.; MAYSKIY, I.N.; PEKHOV, A.P.; NEFED'YEVA, N.P.

Space microbiology. Mikrobiologija 30 no.5:809-817 S-0 '61.
(MIRA 14:12)

1. Institut eksperimental'noy biologii AMN, SSSR.
(SPACE MICROBIOLOGY)

ZHUKOV_VEREZHNIKOV, N.N.; PEKHOV, A.P.; BUYKO, Ye.A.

Nature and significance of bacteriophage. Report No.3: Ultra-thin
phage sections (methods and preliminary data). Biul. eksp. biol. i
med. 52 no.10:78-79 O '61. (MIKA 15:1)

1. Iz otdela immunobiologii (zav. - deyствител'nyy chlen AMN SSSR
N.N.Zhukov-Verezhnikov) Instituta eksperimental'noy biologii (dir. -
prof. I.N.Mayskiy) AMN SSSR, Moskva.
(BACTERIOPHAGE)

PEKHOV, Aleksandr Petrovich, doktor biolog. nauk; STAROSTENKOVA, M.M.,
red.; ATROSHCHENKO, L.Ye., tekhn. red.

[Deep into the invisible world; electron microscopy of microbes]
V glub' nevidimogo mira; elektronnaia mikroskopiia mikrobov.
Moskva, Izd-vo "Znanie," 1962. 30 p. (Novoe v zhizni, nauke,
tekhnike. VIII Seriya: Biologija i meditsina, no.2)
(MIRA 15:3)

(MICROBIOLOGY) (ELECTRON MICROSCOPY)

PEKHOV, Aleksandr Petrovich; MANT'YEV, V.A., red.; PARAKHINA, N.L.,
tekhn. red.

[Electron microscopic investigation of bacteria and phages;
submicroscopic anatomy] Elektronnomikroskopicheskoe issledo-
vanie bakterii i fagov; submikroskopicheskain anatomija,
Moskva, Medgiz, 1962. 223 p. (MIRA 15:9)
(ELECTRON MICROSCOPY) (BACTERIA) (BACTERIOPHAGE)

ABELEV, G.I., kand. med. nauk; BUKRINSKAYA, A.G., kand. med. nauk;
GEL'TSER, R.R., prof.; GOLINEVICH, Ye.M., prof.; ZHDANOV, V.M.,
prof.; ZDRODOVSKIY, P.F., prof.; KALINA, G.P., prof.; KAULEN,
D.R., kand. med. nauk; KIKTENKO, V.S., prof.; KRYLOVA, O.P.,
kand. med. nauk; KUCHERENKO, V.D., kand. med. nauk; LOMAKIN,
M.S., kand. med. nauk; MOSING, G.S., doktor med. nauk; PERSHINA,
Z.G., kand. sel'khoz. nauk; PEKHOV, A.P., doktor biol. nauk;
PESHKOV, M.A., prof.; TIKHONENKO, T.I., kand. med. nauk;
TOVARNITSKIY, V.I., prof.; SHEN, R.M., prof.; ETINGOF, R.N.,
kand. med. nauk; KALININA, G.P., prof., nauchnyy red. toma;
ZHUKOV-VEREZHNICKOV, N.N., prof., otv. red.; VYGODCHIKOV, G.V.,
prof., zamest. otv. red.; TIMAKOV, V.D., prof., zam. otv. red.
BAROYAN, O.A., prof., red.; KALINA, G.P., red.; PETROVA, N.K.,
tekhn. red.

[Multivolume manual on the microbiology, clinic, and epidemiology
of infectious diseases] Mnogotomnoe rukovodstvo po mikrobiologii
klinike i epidemiologii infektsionnykh boleznei. Moskva, Medgiz,
Vol.2. [General microbiology] Obshchaya mikrobiologiya. Red. V.M.
Zhdanov. 1962. 535 p. (MIRA 16:1)

(Continued on next card)

ZHUKOV-VEREZHNIKOV, N.N.; MAYSKIY, I.N.; YAZDOVSKIY, V.I.; PEKHOV, A.P.;
RYBAKOV, N.I.; KLEMPARSKAYA, N.N.; GYURDZHIAN, A.A.; TRIBULEV,
G.P.; NEFED'YEVA, N.P.; KAPICHNIKOV, M.M.; PODOPLELOV, I.I.;
ANTIPOV, V.V.; NOVIKOVA, I.S.; KOP'YEV, V.Ya.

Problems of space microbiology and cytology. Probl.kosm.biol.
1:118-136 '62. (MIRA 15:12)
(SPACE MICROBIOLOGY) (CYTOLOGY)

JUKOV-VEREJNIKOV, N.N. [Zhukov-Verezhnikov, N.N.]; MAISKI, I.N. [Mayskiy, I.N.]; PEHOV, A.P. [Pekhov, A.P.]; NEFEDIEVA, N.P. [Nefed'yeva, N.P.]

Cosmic microbiology. Analele biol 16 no.3:30-39 My-Je '62.

ZHUKOV-VEREZHNICKOV, N.N.; PEKHOV, A.P.

Anatomy of phages and some problems of genetics. Vest.AMN SSSR 17 no.3:
37-48 '62. (MIRA 15:4)

1. Institut eksperimental'noy biologii AMN SSSR.
(BACTERIOPHAGE) (NUCLEIC ACIDS)

ZHUKOV-VEREZHNICKOV, Nikolay Nikolayevich, prof.; PEKHOV, Aleksandr
Petrovich, prof.; SOKOLOV, M.I., red.; MIRONOVA, A.M.,
tekhn. red.

[Genetics of bacteria] Genetika bakterii. Moskva, Medgiz,
1963. 457 p. (MIRA 16:12)

1. Deystvitel'nyy chlen AMN SSSR (for Zhukov-Verezhnikov).
(GENETICS) (BACTERIA)

ACCESSION NR: AT4042681

S/0000/63/ 000/000/0185/0188

AUTHOR: Zhukov-Verezhnikov, N. N.; Mayskiy, I. N.; Yazdovskiy, V. I.; Pekhov, A. P.; Ry*bakov, N. I.; Tribulev, G. P.; Saksonov, P. P.; Dobrov, N. N.; Antipov, V. V.; Kozlov, V. A.; Vy*sotskiy, V. G.; Mishenko, B. A.; Ry*bakova, D. K.; Parfenov, G. P.; Pantyukhova, V. V.; Yudin, Ye. V.; Aniskin, Ye. D.

TITLE: The evaluation of the biological effectiveness of space-flight factors with the aid of lysogenic bacteria

SOURCE: Konferentsiya po aviatsionnoy i kosmicheskoy meditsine, 1963. Aviatsionnaya i kosmicheskaya meditsina (Aviation and space medicine); materialy* konferentsii. Moscow, 1963, 185-188

TOPIC TAGS: lysogenic bacteria, biological sensor, radiation detector, bacteriophage, phage, vibration, irradiation/Vostok III, Vostok IV

ABSTRACT: Lysogenic bacteria, *E. coli* K-12 (λ), was carried on spaceships

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ACCESSION NR: AT4042681

Vostok III and Vostok IV as a biological sensor. The advantages of lysogenic bacteria as biological sensors stem not only from their extreme sensitivity to various types of radiation, but also from the fact that induced changes are directly proportional to the dose of irradiation. In addition, E. coli was subjected to the combined effects of radiation and vibration in ground experiments. Vibration was produced by means of a vibrator with frequencies of 35, 70, and 700 cps, an amplitude ranging from 0.4 to 0.005 mm with a load equal to 10 g, for periods of 15, 30, and 60 min. Co⁶⁰ in doses of 100 r at a rate of 21 r per min served as a source of radiation. Lysogenic bacteria carried on spaceships Vostok III and Vostok IV revealed induction of genetic changes produced by space-flight factors which was indicated by a significant increase in the number of phage particles. The induced effect was more pronounced on Vostok III than on Vostok IV. Forty-eight hours after its return to earth, the bacteria carried by Vostok III had produced 4.6 times as many phage particles as controls which had remained on earth. Ground experiments with vibration indicate that the combined vibration and gamma irradiation, followed by a second exposure to vibration, double the biological effectiveness of gamma rays.

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L 10401-61
ACCESSION NR: AP3002914

EPF(c)/EWT(m)/BDS/ES(b)--AFFTC/ASD--Pr-l--AR/K

S/0220/63/032/003/0447/0449

AUTHOR: Pekhov, A. P.; Yudin, Ye. V.; Besova, T. A.; Svchikov, M. S.

63
61

TITLE: Effect of high-energy protons on genetic recombination in colon bacilli

SOURCE: Mikrobiologiya, v. 32, no. 3, 1963, 447-449

TOPIC TAGS: high-energy protons, 660-Mev protons, colon bacilli, Escherichia coli, irradiation effects, genetic recombination, donor strain, receptor strain, genetic structure, transmission of characteristics

ABSTRACT: A study was conducted to determine the effect of irradiation with high-energy protons on genetic recombination of variant strains of E. coli K-12. The donor strain Hfr H was a thiamine-dependent, streptomycin-sensitive mutant. The receptor strain PA678F- was characterized by loss of ability to synthesize threonine (T-), leucine (L-), and thiamine (B sub 1-) or to ferment lactose (Lac-), galactose (Gal-), maltose (Mal-), xylose (Xyl-), and mannitol (Mtol-) and by resistance to streptomycin ($\text{Sm}^{\text{sup r}}$) and Lambda phage. Transmission of characteristics from donor to receptor cells occurs in the following order: T-L-Lac-Gal-H-Sm-M. Donor strains were proton-irradiated with the synchrocyclotron

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L 10401-63
ACCESSION NR: AP3002914

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at the Ob'yedinenny'y institut yaderny'kh issledovaniy (Joint Institute of Nuclear Studies), then combined with the receptor strain, incubated, and the recombinants isolated. Proton irradiation of donor strain cells was found to have an effect on conjugation: the number of T^r L^r Sm^r recombinants increased with the radiation dose. Irradiation also had an effect on the genetic structure of the recombinants: the T^r L^r Sm^r recombinants received the ability to ferment lactose and galactose, and the Gal^r Sm^r recombinants received the ability to ferment lactose and to synthesize threonine and leucine. The number of recombinants receiving the ability to ferment lactose and galactose and to synthesize threonine and leucine also increased as the radiation dose increased. The stimulatory character of the proton effect is apparently limited to relatively low radiation levels, since significantly greater doses of protons lower the frequency of recombination. Orig. art. has: 1 figure and 1 table.

ASSOCIATION: Institut eksperimental'noy biologii, AMN SSSR (Institute of Experimental Biology AMN SSSR)

Card 2/3

L 10401-63
ACCESSION NR: AP3002914

SUBMITTED: 300ct63 DATE ACQ: 23Jul63

ENCL: 00

SUB CODE: 00 NO REF Sov: 001

OTHER: 006

Ja/
Card 3/3

ZHUKOV-VEREZHENIKOV, N., prof.; KOP'YEV, V., dotsent; MAYSKIY, I., prof.;
PEKHOV, A., doktor biolog.nauk; TRIBULEV, G., dotsent;
YAZDOVSKIY, V., prof.

Biological aspects of the theory of relativity. Av.i kosm. 45
no.2:13-35 F '63. (MIRA 16:2)

1. Deystvitel'nyy chlen AMN SSSR (for Zhukov-Vereshnikov).
(Space biology)

ACCESSION NR: AT4037688

S/2865/64/003/000/0184/0192

AUTHOR: Zhukov-Verezhnikov, N. N.; Yazdovskiy, V. I.; Mayskiy, I. N.; Tribulev, G.P.; Pekhov, A.P.; Saksenov, P.P.; Rybakov, N. I.; Antipov, V. V.; Artem'yev, N.S.; Kozlov, V. A.; Mishchenko, B. A.; Yudin, Ye. V.; Rybakova, K.D.; Aniskin Ye. D.

TITLE: Microbiological and cytological research in the conquest of space

SOURCE: AN SSSR. Otdeleniye biologicheskikh nauk. Problemy kosmicheskoy biologii, v. 3, 1964, 184-192

TOPIC TAGS: microbiology, cytology, lysogenic bacteria, synchrocyclotron, cyclotron, telemetry, space flight, antiradiation drug, ionizing radiation

ABSTRACT: Microbiological research has concentrated on highly radiosensitive biological objects which register molecular changes in response to irradiation. The specific object selected was lysogenic bacteria, *E.coli* K-12 (λ), which is very sensitive to ionizing radiation and reacts by producing phage particles. Retent synchrocyclotron experiments have shown that *E.coli* bacteria react similarly to protons and neutrons and that the phage production is proportional to the irradia-

Card 1/3

L16634-65 EEO-2/ENG(j)/FSF(h)/FSS-2/ENG(r)/EWT(l)/PS(v)-3/EBC(k)-2/ENG(v)/
FCC/EWA(d)/EEC-4/EEC(t)/ENG(a)/ENG(c)/EWA(h) Po-4/Pc-5/Pq-4/Pac-4/pee-2/
Peb/Pi-4/Pb-4 ESD(s1)/SSD/BSD/AFML/AS(m)-2/AND/AFIAC/AFETR/ATTC(b)/ATTC(a)

TT/DD/GW/WS

ACCESSION NR: AP4046443

8/0305/64/004/005/0738/0742B

80

79

AUTHOR: Zhukov-Vorazhnikov, N. N.; Mayakiv, I. N.; Pekhov, A. P.;
Rybakov, N. I.; Saksenov, P. P.; Mischenko, B. A.; Kozlov, V. A.;
Rybakova, K. D.; Aniskin, Ye. D.

TITLE: Effect of antiradiation drugs on phage production of lysogenic bacteria induced by x-irradiation

SOURCE: Radiobiologiya, v. 4, no. 5, 1964, 738-742

TOPIC TAGS: antiradiation drugs, radioprotectors, phage production, lysogenic bacteria, *E. coli* K-12(λ), x-ray, irradiation, biological radiation sensor, space flight, 2-mercaptoethylamine, mercamine disulfide, urethane

ABSTRACT: Experiments have been performed to determine the effects of antiradiation drugs and urethane on biological objects capable of warning of radiogenetic damage. Lysogenic bacteria *E. coli* K-12(λ) was selected because it proved to be a reliable and sensitive biological radiation sensor in space flight experiments by producing

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L 16634-6
ACCESSION NO: AP4046443

phage particles in proportion to the dose of ionizing radiation. The mechanism of phage production by lysogenic bacteria constitutes a molecular-genetic reaction related to transformation-type genetic anomalies. The highest permissible concentration of each substance was used which did not have a bacteriostatic effect on *E. coli* K-12(λ). The concentrations for 2-mercaptopropylamine and mercamine disulfide were 0.05% and 0.8% for urethane. Irradiation of bacterial cultures was produced by an RUM-7 generator with a dose rate of 4050 r/min, a voltage of 50 kv, an amperage of 15 mamps, an irradiation distance of 8 cm, and using a 0.1-mm Al filter. It was found that 2-mercaptopropylamine and mercamine disulfide exert a substantial protective action on the prophage, but that they have no protective effect on mature phage particles. Urethane shows no radioprotective effect on lysogenic bacteria. The results obtained coincide with those obtained with other biological objects, and the ease of working with lysogenic bacteria indicate that *E. coli* K-12(λ) can serve as a useful subject for the fast primary identification of chemical compounds capable of protecting against genetic injury by radiation.

Orig. art. has: 1 figure and 3 tables.

L 16634-65

ACCESSION NR: AP4046443

ASSOCIATION: Institut eksperimental'noy biologii AMN SSSR, Moscow
(Institute of Experimental Biology, Academy of Medical Sciences of
the SSSR)

SUBMITTED: 07Mar63

ENCL: 00 SUB CODE: L9

NO REP. SOV: 014

OTHER: 014

Card 3/3

PEKHOV, A.P.; MISHCHENKO, B.A.

Electron microscope study of the development of the A phase
in indicator strain cells. Biul. eksp. biol. i med. 56 no. 1:
63-66 D '62. (MIRA 17:1)

1. laboratoriya genetiki mikroorganizmov (zav. - doktor biologicheskikh nauk A.P. Pekhov) Instituta eksperimental'noy biologii (dir. - prof. I.N. Nayskiy) ANN SSSR, Moskva.

L 37643-66 FSS-2/EWT(1)/EEC(k)-2/FCC/P SCPB TT/DD/JK/GW

ACC NR. AP6024650 SOURCE CODE: UR/0216/66/000/004/0592/0593

AUTHOR: Zhukov-Verezhnikov, N. N.; Mayskiy, I. N.; Pekhov, A. P.; ^{CD}
Rybakov, N. I.; Dobrov, N. N.; Antipov, V. V.; Kozlov, V. A.; ^B
Saksonov, P. P.; Podoplelov, I. I.

ORG: none

TITLE: Results of study of the effect of cosmic radiation and other
spaceflight factors on lysogenic bacteria and human cell cultures
[Paper presented at the Anniversary Symposium of the Institute of Bio-
physics of the Czechoslovak Academy of Sciences held in Brno in May
1965] ^{III}

SOURCE: AN SSSR. Izvestiya. Seriya biologicheskaya, no. 4, 1966,
592-593

TOPIC TAGS: spaceflight effect, radiation effect, Hela cell, lysogenic
bacteria / Vostok 4 spacecraft, Vostok 6 spacecraft, Voskhod 1 spacecraft

ABSTRACT: Single-layer cultures of normal human cells (fibroblasts and
amniotic cells) and human cancer cells (Hela strain), together with
cultures of lysogenic bacteria (E. coli K-12), have been consistently
used as radiation indicators on Soviet spacecraft. Results of these
experiments have shown that repeated exposure of a culture of Hela cells
to spaceflight factors on the Vostok-4 and Vostok-6 flights produced
Card 1/2

UDC: 629.195:577.391

L 37643-66

ACC NR: AP6024650

changes in experimental cells as compared with laboratory controls and with Hela cells exposed on one spaceflight only. A longer latent period of recovery of growth capacity and other characteristics [not named] were noted in twice-flown cultures. In addition, the coefficient of proliferation for Hela cells exposed on both Vostok-4 and Vostok-6 was one-half that for intact controls and for Hela cells exposed to spaceflight only once. These data suggest that spaceflight factors have a cumulative biological effect on human cell cultures. However, a direct dependence of biological effect on length of spaceflight exposure has not been established in experiments with the other radiation indicator, the lysogenic bacteria E. coli K-12 (λ). It is interesting to note that when the same Hela cells used on Vostok-4 and Vostok-6 were also exposed on Voskhod-1, a well-defined drop in the proliferation coefficient was observed in comparison with intact cultures. Experimental colonies were more compact, and there were more dead cells. Other reliable differences [not enumerated] were also found between intact controls and thrice-exposed cultures. However, no reliable differences could be detected between thrice-exposed Hela cells and a control strain used only on Vostok-6. It is suggested that the biological effect of spaceflight may be the result of the combined influence of [JS] radiation, vibration, and weightlessness..

SUB CODE: 06/ SUBM DATE: none/ ATD PRESS: 5046

Card 2/2 vmb

PERKOV, Aleksandr Petrovich, doktor biol. nauk, prof.; NIKOLAYEV,
V.E., red.

[What is heredity?] Chto takoe nasledstvennost'? Moscow,
Znanie, 1966. 30 p. (Novoe v naуke, zhizni, tekhnike.
VIII serija: Biologiya i meditsina, no.2)
(MIRA 19:1)

GOLUBEVA, I.V.; PEKHOV, A.P.; ZAKIROV, N.A.

Genetic recombinations in bacteria. Report No.2: Changes in the antigenic structure of Escherichia coli in sex recombination. Zhur. mikrobiol., epid. i immun. 40 no.11:16-21 N '63.

(MIRA 17:12)

1. Iz Instituta eksperimental'noy biologii AMN SSSR i Moskovskogo instituta vaktsin i syvorotok imeni Mechnikova.

ZHUKOV-VEREZUNIKOV, N.N.; MAYSKIY, I.N.; PEKHOV, A.P.; RYBAKOV, N.I.;
SAKSONOV, P.P.; MISHCHENKO, B.A.; KOZLOV, V.A.; RYBAKOVA, K.D.;
ANISKIN, Ye.D.

Effect of radioprotective substances on the phage production of
lysogenic bacteria induced by X-ray irradiation. Radiobiologija
4 no.5:738-742 '64. (MIRA 18:4)

1. Institut eksperimental'noy biologii AMN SSSR, Moskva.

L 54712-65

ACCESSION NR: AP5018133

UR/0219/64/058/011/0073/0076

AUTHOR: Pekhov, A. P.; Yudin, Ye. V.

TITLE: Effects of irradiation with x-rays on the frequency of genetic recombinations and the properties of recombinations in E. coli

SOURCE: 'Bull. eksperimental'noy biologii i meditsiny', v. 53, no. 11, 1964,
73-76TOPIC TAGS: irradiation effect, radiation biologic effect, irradiation dosimetry,
bacteria, genetics

ABSTRACT: The effects produced by irradiation with X-rays on genetic recombination in E. coli were studied. The donor strain, E. coli Hfr, which was irradiated with X-rays in doses of $0 - 150 \times 10^3$ r before being crossed with the recipient strain, was thiamine-dependent and sensitive to streptomycin (S^r), phages of group T, and gamma phage. The order of transmission by it of characteristics to the recipient cells was threonine (T) - leucine (L) - lactose (Lac) - galactose (Gal). The recipient

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ACCESSION NR: AF5018133

strain, *E. coli* PA678F, was resistant to streptomycin (S^r) and had lost the capacity to synthesize threonine, leucine, and thiamine (i. e., thiamine was added to the medium for the derived strain in every instance) or to ferment lactose, galactose, xylose, mannose, or maltose. It was resistant to phages T_1 , T_5 , T_g , and gamma. The initial doses (up to $20 \times 10^3 - 30 \times 10^3$ r) produced an increase in the number of $T^+L^+S^r$, L^+S^r , and T^+S^r recombinations. With increasing doses of radiation, the number of these recombinations then decreased. The number of Gal^+S^r recombinations began to decrease beginning with the smallest doses of radiation. With increasing doses of radiation, the number of $T^+L^+S^r$ recombinations with Lac^+ and Gal^+ decreased. The number of Gal^+S^r with Lac^+ first increased and then decreased. The percentage of T_1^S and gamma S showed a general tendency to decrease with increasing doses of radiation. The T^+L^+ linkage of characteristics was disturbed by irradiation: the number of T^+S^r recombinations that inherited the capacity to synthesize leucine decreased with increasing doses of radiation, while that of L^+S^r recombinations with an inherited capacity to synthesize threonine did not decrease. This was due to the fact that L^+ was transmitted to recipient

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L 54712-65
ACCESSION NR: AF5018133

cells after T⁺. An estimation of the relative extent of transmission of non-selective characteristics showed that with increasing distance of the locus of the characteristic from the initial segment of the donor chromosome that was transferred, the radiation sensitivity of the characteristic increased. Orig. art. has: 1 graph, 3 tables.

ASSOCIATION: Laboratoriya genetiki mikroorganizmov Instituta eksperimental'noy biologii AN SSSR, Moscow (Laboratory of Genetics of Microorganism, Institute of Experimental Biology, AMN SSSR)

SUBMITTED: 29Ju163

ENCL: 00

SUB CODE: LS, NP

NR REF Sov: 001

OTHER: 002

JPRS

Card 3/3

L 54862-45 EEI-2/BIG(j)/FSS-2/EWG(r)/EWI(1)/FS(+) -3/EEG(k)-2/EWG(v)/EWA(d)/
ENG(a)-2/EHG(c) Po-4/Pe-5/Pg-4/Pac-1/Pae-2/P1-4 WWH/TT/DD/GI

ACCESSION NR: A1'5015678

UR/0293/65/003/003/0492/0494
629.198.3:576.809.51

AUTHOR: Zhukov-Verezhnikov, N. N.; Mayskiy, I. N.; Pekhov, A. P.; Antipov, V. V.;
Rybakov, N. I.; Kozlov, V. A.

TITLE: Investigation of the biological effect of space-flight factors using
lysogenic bacteria in experiments on Vostok-5 and -6

SOURCE: Kosmicheskiye issledovaniya, v. 3, no. 3, 1965, 492-494

TOPIC TAGS: space flight, biological effect, *E. coli*, phage activity, bacteria,
genetics, lysogenic bacteria, chemical antiradiation agent

ABSTRACT: The genetic effects of space flight on lysogenic bacteria were studied, and a chemical means of protection was investigated. The chemical agent was β -mercaptopropylamine, a substance which blocks the formation of induced phage particles during x-ray and gamma irradiation. As in eight earlier flights (four Sputnik and four Vostok), a suspension of *E. coli* K-12 (λ) was used. The bacteria were divided into three groups: experimental samples, laboratory controls, and controls kept at launch site. Each group contained some untreated samples and some with β -mercaptopropylamine (0.05% concentration) added before flight. After each

Card 1/3

L 54862-63

ACCESSION NR: AIP5015678

flight, the number of viable bacteria was determined, and an analysis of phage particles was made. Experimental results showed that the number of phage particles in untreated experimental samples significantly exceeded the number in the launch-site controls (3.68 times for Vostok-5). It was also established that phage formation in these experiments on Vostok-5 and Vostok-6 was about the same as during Vostok-3 and Vostok-4. Thus, space-flight factors have a stimulating effect on lysogenic bacteria, as demonstrated by the statistically reliable increase in phage production. However, no direct relationship between this stimulating effect and the length of exposure of the bacteria in space has been detected. Under space-flight conditions, β -mercaptopropylamine almost completely prevents the formation of induced phage particles. In addition, this substance significantly lowers the level of spontaneous phage formation. The protective effect of β -mercaptopropylamine consists of its ability to block the genetic reaction of formation of induced phage. Since the number of viable cells in control and experimental samples was the same, no conclusion can be made about the protective action of this substance against the lethal effects of space flight. Orig. art. has 1 table.

[JS]

ASSOCIATION: none

Card 2/3

L 54862-61					
ACCESSION NR: AF5015678					
SUBMITTED: 30Ju64	ENCL: 00	SUB CODE: LS			
NO REF Sov: 007	OTHER: 000	ATD PRESS: 4031			
Card 3/3					

APPROVED FOR RELEASE: 06/15/2000

CIA-RDP86-00513R001239830002-3"

PEKHOV, A.F.; GOLUBEVA, I.V.; ZAKIROV, N.A.; BESOVA, T.A.

Genetic recombination in bacteria. Report No.1: Fertility of typing /
Escherichia coli in crosses with nontyping strains and analysis of the
recombinant s. Zhur.mikrobiol.,spid.i immun. 40 no.12:102-107 D '63.
(MIRA 17:12)

1. Iz Instituta eksperimental'noy biologii AMN SSSR i Moskovskogo
instituta vaktsin i syvorotok imeni Mechnikova.

ZHUKOV-VEREZHNIKOV, N.N.; YAZDOVSKIY, V.I.; MAYSKIY, I.N.; TRIBULIN, G.P.
PEKHOV, A.P.; SAKSONOV, P.P.; RYBAKOV, N.I.; ANTIPOV, V.V.;
ARTIM'EV, N.S.; KOCLOV, V.A.; MISHCHENKO, B.A.; FUDIN, Ye.V.
RYBAKOVA, K.D.; ANICKIN, Ye.D.

Microbiological and cytological studies in conquering space.
Probl. kosm. biol. 3:184-192 '64. (MIRA 17:6)

MAYSKIY, I.N., glav. red.; TOLGUR, V.S., nauchn. red.; BOGOYAVLENKAYA, N.V., nauchn. red.; VYAZOV, O.Ye., red.; GEORGIYEV, O.Ye., red.; DEBOV, S.S., red.; DOBROKHOTOV, V.I., red.; ZHUKOV-VEREZHENIKOV, N.N., red.; LAGUCHEV, S.S., red.; LIOZNER, L.D., red.; LOMAKIN, M.S., red.; FEKHOV, A.P., red.; TONGUR, V.S., red.; GOSTEV, V.S., red.

[Nucleic acids and nucleoproteins; transactions] Nukleino-
vye kisloty i nukleoproteidy; trudy. fod red. I.I. Maiskogo,
Torgura, V.S i N.V.Bogoiavlenskoi. Moskva, Mosk. biokhim.
ob-vo, 1961. 345 p. (MIRA 17:9)

1. Konferentsiya po nuklei novym kislotam i nukleoproteidam.
1st. Moscow 1959. 2. Institut eksperimental'noj biologii AMN
(for Tongur, ostev). 3. Pervyy Meditsinskiy institut imeni
I.F. Sechenova, Moskva (for Debov).

ACC NR: AR6016153

SOURCE CODE: UR/0058/65/000/011/A026/A026

AUTHOR: Belous, A. L.; Kurochkin, S. S.; Pashvykin, V. V.; Pekhov, G. P.

TITLE: Memory devices for 4096 numbers for multichannel and multidimensional analyzers

SOURCE: Ref. zh. Fizika, Abs. 11A275

REF SOURCE: Tr. Soyuzn. n.-i. in-ta priborostro., vyp. 1, 1964, 114-130

TOPIC TAGS: computer memory, pulse analyzer, memory address, pulse shaper

ABSTRACT: It is indicated that in order to construct a memory for multichannel and multidimensional analyzers it is advantageous, from the point of view of reliability and economy, to use 3- and 4-coordinate variants of address devices, operating on the coinciding half-current principle. Memories with transistor-transformer gates and 3-coordinate address systems are described. The operation of the following units of such a memory is analyzed: memory cube for 4096 channels, reading signal amplifiers, current pulse shapers, and supplementary elements of the memory. The operation of the memory with diode-transistor bridge gates and of its elements (address gates and address-current generator) are considered. It is noted that the tests of the memory have demonstrated its operating ability at supply voltages ranging from 2.5 to 9.5 v.
N. P. [Translation of abstract]

SUB CODE: 09

Card 1/1

L 36049-66 Ext(1)
ACC NR: AR6014193

SOURCE CODE: UR/0271/65/000/011/B014/B014

41

B

AUTHOR: Belous, A. L.; Kurochkin, S. S.; Pashvykin, V. V.; Pekhov, G. P.

TITLE: Storage for 4096 numbers intended for multichannel and multivariate
analyzers

SOURCE: Ref. zh. Avtomatika, telemekhanika i vychislitel'naya tekhnika, Abs. 11B122

REF SOURCE: Tr. Sovuzn. n.-i. in-ta priborostr., vyp. 1, 1964, 114-130

TOPIC TAGS: computer, computer storage device , MULTICHANNEL ANALYZER

ABSTRACT: From the reliability and economy viewpoints, it is expedient to use 3- and 4-coordinate address devices operating on the coincident half-current system for synthesizing storages for multichannel and multivariate analyzers. Storage devices with transistor-transformer switches and a 3-coordinate address system are described. The operation of the following elements is examined: a 4096-channel storage cube, read-signal amplifiers, current-pulse shaper, and auxiliary elements. The operation of a storage with diode-transistor bridge switches and its elements (address switches and address-current generator) is considered. Tests of the above storage system revealed its operability at a supply voltage variation of 2.5--9.5 v. Twelve figures. Bibliography of 3 titles. N. P. [Translation of abstract]

SUB CODE: 09

Card 1/1 vmb

UDC: 681.142.652.2

PEKHOV, I. S., inzh.-inspektor magistral'noy svyazi

Repair of the filters of high-frequency V-12 apparatus. Avton.,
telem. i sviaz' 7 no.4:33 Ap '63. (MIRA 16:4)

(Electric filters—Maintenance and repair)

PEKHOV, I.S.

S optional communication system using a cable without insulation.
Avtom., telem. i svyaz' 9 no.4:32-40 Ap '65.

(VKR 18:5)

1. Starshiy inzh.-inspektor magistral'nyy svyazi Ministerstva
putey soobshcheniya.

PEKHOV, I.S., inzh.; MOROZOV, Yu.A., inzh.

Interference caused by an inductive signal in consolidated networks.
Avtom. telem. i sviash' 3 no.8:29-30 Ag '59. (MIRA 13:2)

1.Nauchno-issledovatel'skaya laboratoriya Novosibirskogo
elektrotehnicheskogo instituta svyazi (for Morozov).
(Coaxial cables) (Electric transformers)

Pearlmutt, 2.12

ITENBERG, I.M., red.; BELYAYEVA, L.I., red.; GRACHIKOVA, V.I., red.;
PUSHKOVA, Z.P., red.; ROSTOVTSEVA, Ye.P., red.; BUKHANOVA, A.V.,
tekhn.red.; CHEKANIKHIN, S.M., tekhn.red.

[World atlas] Atlas mira. Moskva, 1958. 135 p. (MIRA 11:9)

1. Russia (1923- U.S.S.R.) Glavnaya upravleniye geodezii i
kartografii.
(Atlases)

PEKHOVA, Z.P.

ITENBERG, I.M., redaktor; BELYAYEVA, L.I., redaktor; GRACHIKOVA, V.I.,
redaktor; PEKHOVA, Z.P., redaktor; ROSTOVTSIEVA, Ye.P., redaktor;
BUKHANOVA, N.I., tekhnicheskiy redaktor; LIFSHITS, N.I., tekhniches-
kiy redaktor; SIMANOVSKIY, A.Ya., tekhnicheskiy redaktor

[World atlas] Atlas mira. Moskva, 1955. 136 p. maps. (MLRA 8:7)

1. Russia (1923- U.S.S.R.) Glavnoye upravleniye geodesii i karto-
grafii.

(Atlases)

USSR/Physics - Heat exchange

FD-1004

Card 1/1 : Pub. 153 - 8/24

Author : Pekhovich, A. I.

Title : Problem of heat exchange in the case of a fluid moving along flat wall

Periodical : Zhur. tekhn. fiz., 24, 1020, 1021, Jun 1954

Abstract : Extends to the case of fluids the results of M. A. Mikheyev's generalization (*Osnovy teploperedachi* [Principles of heat transfer], 1947), in the form of criteria, of experimental data on heat emission of air moving along a flat wall. Discusses Mikheyev's attempt to apply to capillary liquid. Two references: Mikheyev, mentioned, and A. I. Pekhovich (1937)

Institution : -

Submitted : July 25, 1953

PEKHOVICH, A.I., inzhener.

Frozen soil calculations. Izv.VNIIG 41:57-66 '49. (MLRA 10:2)
(Frozen ground)

BIBIKOV, D.N.; PETRUNICHEV, N.N. Prinimali uchastiye: DOBROVOL'SKAYA,
V.K., nauchnyy sotrudnik; PEKHOVICH, A.I., nauchnyy sotrudnik.
SHADRIN, G.S., red.; ZABRODINA, A.A., tekhn.red.

[Difficulties caused by ice at hydroelectric power stations;
planning measures for their elimination] Ledovye zatrudneniya
na gidrostantsiiakh; proektirovanie meropriiatii po okh ustra-
neniu. Leningrad, Gos.energ.izd-vo, 1950. 158 p. (MIRA 12:11)
(Hydroelectric power stations) (Ice on rivers, lakes, etc.)

BIBIKOV, D.N., starshiy nauchnyy sotrudnik, kand. tekhn. nauk; PEKHOVICH, A.I.,
Inzh.

Growth rate of ice under water. Izv. VNIIG 46:207-210 '51.
(MIRA 12:5)
(Ice)

PEKHOVICH, A.I., inzh.

Calculating the static pressure of ice. Izv.VNIIG 49:65-82
'53. (MIRA 12:5)
(Hydraulic engineering) (Ice on rivers, lakes, etc.)

PEKHOVICH, A.I., kand.tekhn.nauk

Calculating the freezing rate of percolating soil by means
of a row of columns after the linking of soil-freezing cylin-
ders. Izv.VNIIG 51:152-164 '54.
(MIRA 12:5)
(Soil freezing)

124-57-1-769

Translation from: Referativnyy zhurnal, Mekhanika, 1957, Nr 1, p 101 (USSR)

AUTHOR: Pekhovich, A.I.

TITLE: On the Consideration of the Permeability to Water of Frozen-earth
Shields During Their Erection (Ob uchete vodopronitsayemosti
ledogruntovykh zaves v protsesse ikh vozvedeniya)

PERIODICAL: Izv. Vses. n.-i in-ta gidrotekhn., 1955, Vol 54, pp 208-213

ABSTRACT. In the setting up of cofferdams impervious to water by means of artificial freezing, freezer cores are sunk into the ground at specified distances; in a first stage, frozen-earth cylinders form separately around these cores; subsequently these cylinders coalesce into a single mass impervious to water. In order to determine a practicable freezing procedure and a water-draining procedure from the pit, the quantity $V(t) = Q(t)/Q_0$ must be known, where Q_0 is the discharge of the seepage flow up to the beginning of the freezing operation, $Q(t)$ is the discharge of the seepage flow in the presence of the frozen-earth cylinders, and t is the time. Following the complete coalescence of the frozen-earth cylinders, $V(t) = \text{const}$. The author formulates the following problem and solves it approximately by means of the fragment

Card 1/3

124-57-1-769

On the Consideration of the Permeability to Water of Frozen-earth (cont.)

method of N. N. Pavlovskiy. A cofferdam is given with a rectangular cross section of thickness H . The frozen-earth cylinders having a radius R are placed in a single file and at a uniform distance S from one another. The cofferdam is supported by a permeable foundation. The water seepage is due to the difference in pressure head on the two sides of the cofferdam. There is no bypass seepage about the cofferdam. The earth which forms the dam is uniform. The rate of growth of the frozen-earth cylinders is extremely small (not more than 6 cm per day), which justifies the assumption of the motion of the seepage flow as stationary. The flow velocities of the water everywhere are within the limits of applicability of Darcy's law. With all of these assumptions the following approximate formula is obtained for the magnitude of v :

$$v = \frac{\chi}{\chi + (1 - \xi^2 (\sin^{-1} \zeta + \pi/2) - \xi - \pi/2)}$$

where

$$\chi = \frac{H}{S} \quad \xi = \frac{2R}{S} \quad R = R(t), \quad S = S(t).$$

Card 2/3

124-57-1-769

On the Consideration of the Permeability to Water of Frozen-earth (cont.)

A comparison of the results obtained with this formula, as against the results obtained with the EGDA method, reveals a deviation of the order of ± 5 percent. In an analogous manner the more general problem, with n rows of parallel cylinders, is solved. However, further analysis shows that, from the point of view of the counter-seepage effect, it is preferable that all available frozen-earth cylinders be disposed in a single row. Bibliography: 6 references.

P. F. Fil'chakov

1. Dams--Seepage--Control 2. Frozen earth--Permeability--Mathematical analysis

Card 3/3

YESTIPEYEV, Aleksandr Mikhaylovich, prof.; PEKHOVICH, A.I., red.; SOBOLEVA,
Ye.M., tekhn.red.

[Controlling sludge ice at hydroelectric power plants] Regulirovanie
shugovogo potoka na gidroelektrostantsiiakh. Moskva, Gos. energ.
izd-vo, 1958. 179 p.
(Hydroelectric power stations)
(Ice on rivers, lakes, etc.)

ACCESSION NR: AP4011536

8/0170/64/000/001/0059/0062

AUTHOR: Zhidkikh, V. M.; Pekhovich, A. I.

TITLE: The problem of a regular thermal regime

SOURCE: Inzhenerno-fizicheskiy zhurnal, no. 1, 1964, 59-62

TOPIC TAGS: regular thermal regime, heat transfer, equilibrium temperature, plane-parallel plate, steady-state thermal regime

ABSTRACT: The onset of the regular thermal regime is examined for three heating (cooling) problems of an infinite plane-parallel plate. The temperature of the medium is assumed to vary linearly and the heat flows are assumed to be constant or varying linearly at the boundaries. The onset is shown to take place in different planes of the plate at different times. Curves are plotted from which the time of onset of the regular regime for the cases can be determined. In all three cases the midplane is the last to reach a regular thermal regime, but in two cases, in contrast to the third, there is always a plane in which the thermal regime is absolutely regular. Errors involved in the calculations are discussed. Orig. art. has: 2 figs.

Card 1/2

ACCESSION NR: AP4011536

ASSOCIATION: Vsesoyuznyy nauchno-issledovatol'skiy institut gidrotekhniki im. B. E. Vedeneyeva, Leningrad (All-Union Scientific-Research Institute of Hydrotechnology)

SUBMITTED: 11Feb63

DATE ACQ: 14Feb64

ENCL: 00

SUB CODE: PH, AJ

NO REF Sov: 003

OTHER: 000

Card 2/2

YESTIPEYEV, Aleksandr Mikhaylovich; PEKHOVICH, A.I., red.; SOBOLEVA,
Ye.M., tekhn.red.

[Hydroelectric power in Finland] Gidroenergetika Finliandii.
Moskva, Gosenergoizdat, 1962. 86 p. (MIRA 16:2)
(Finland--Hydroelectric power)

PETRUNICHEV, N.N., kand.tekhn.nauk; PEKHOVICH, A.I., kand.tekhn.nauk;
ZHIDKIKH, V.M., inzh.

Coordination of research work in the field of ice engineering.
Gidr.stroi. 32 no.7:61 Jl '62.
(Ice on rivers, lakes, etc.) (MIRA 15:7)

YESTIFEEV, A.M., prof.; PEKHOVICH, A.I., starshiy nauchnyy sotrudnik,
kand.tekhn.nauk; ALEYNIKOV, S.M., mladshiy nauchnyy sotrudnik

Blackening the surface of ice: a method of speeding the spring
ice thaw. Izv. VNIIG 65:139-147 '60. (MIRA 14:5)
(Ice on rivers, lakes, etc.) (Thawing)

DOBROVOL'SKAYA, V.K.; PEKHOVICH, A.I.

Experimental investigation of the effect of wind waves on ice formation in reservoirs. Meteor. i gidrol. no.10:33-36 O '60.

(Ice on rivers, lakes, etc.)

(Waves)

(MIRA 13:10)

PEKHOVICH, A.I., starshiy nauchnyy sotrudnik, kand.tekhn.nauk

Calculating the speed of freezing percolating soils by a
series of cores until the consolidation of ground-ice
cylinders. Izv.VNIIG 58:187-200 '58. (MIRA 13:7)
(Soil freezing)

PEKHOVICH, A.M.; SIVOPLYAS, A.L.

Difference in the temperature of some organs under normal conditions
and during general anesthesia. Khirurgiia 39 no.11:133-134 N '63.
(MIRA 17:11)

1. Iz kafedry gospital'noy khirurgii (zav. - prof. V.L. Khenkin)
Chernovitskogo meditsinskogo instituta.

PEKHOVICH, A. M.

"Case of a Benign Gastric Tumor in a Patient Afflicted
with Neurofibromatosis," Khirurgiya, No. 3, 1949.

Cand. Med. Sci., Clinic Hospital Surgery, Chernovitsk
Med. Inst., -cl949-.

Name: PEKHTELEV, Ivan Georgiyevich

Dissertation: Belinskiy as an Historian of Russian
Literature

Degree: Doc Philological Sci

Affiliation: Kazan' State Ped Inst

Defense Date, Place: 16 Jan 56, Council of Moscow State Ped
Inst imeni Lenin

Certification Date: 1 Dec 56

Source: BMVO 6/57

L 01167-66 EMT(1)/EMT(m)/EPA(s)-2/EPA(w)-2/T-2/EMI(m)-2 IJP(c)

ACCESSION NR: AP5016656

UR/0382/65/000/002/0089/0091

538.4

AUTHOR: Pekhteleva, N. I.; Smirnov, A. G.

TITLE: Electrolyte hydrodynamics with electrochemical processes in the rectangular bath with flat electrodes in a constant magnetic field

SOURCE: Magnitnaya gidrodinamika, no. 2, 1965, 89-91

TOPIC TAGS: electrolyte, MHD flow, hydrodynamics, magnetic field, gravitation effect

ABSTRACT: The influence of longitudinal and transverse constant magnetic field on the hydrodynamic behavior of an electrolyte undergoing electrochemical processes in a tub with non-conducting walls is investigated. Several cases are investigated where the strength of electric and magnetic fields and their relative orientations are varied. A CuSO₄ electrolytic cell was used in this study. It is found that gravitation has an effect on the flow as well as direction of the magnetic field which can help or retard the flow. Orig. art. has: 1 formula, 3 figures.

ASSOCIATION: none

SUBMITTED: 27 Jan 65

ENCL: 00

SUB CODE: EM, ME

NO REF Sov: 005

OTHER: 000

Card 1/1

PEKHOTA, I.

Eliminate unnecessary sections. Moloch. pros. 17 no. 6:13-14
'56. (MLRA 9:10)

1. Rosglavmoloko. (Dairy industry)

PEKHOVICH, V.A., inzh.

Mechanization of iron casting. Makh.i avtom.proizv. 16
no.9:33-35 S '62. (MIRA 15:9)
(Foundries--Equipment and supplies)

"APPROVED FOR RELEASE: 06/15/2000

CIA-RDP86-00513R001239830002-3

PEGLOVSKIY, V.L. [Pehlovs'kiy, V.L.]; PEKISHEV, R.O.

Modification of polyethylene for the manufacture of lasts and
heels. Leh. prom. no.4:29-30 O-D '64 (MIRA 18:1)

APPROVED FOR RELEASE: 06/15/2000

CIA-RDP86-00513R001239830002-3"

PEKSHEV Valeriy Aleksandrovich

PEKSHEV, Valeriy Aleksandrovich; SHIENSKAYA, V.A., red.; LSKANOVA, I.S.,
tekhn.red.

[National economy of the Federal People's Republic of Yugoslavia;
statistical indices] Narodnoe khoziaistvo Federativnoi Narodnoi
Respubliki Jugoslavii; statisticheskie pokazateli. Moskva,
Vneshtorgizdat, 1957. 227 p. (MIRA 11:2)
(Yugoslavia--Economic conditions)

PEKSHIBAYEV M.I.

Country : USSR

Category: Forestry. Forest Cultures.

Abs Jour: RZhBiol., No 11, 1958, No 48786

Author : Pekshibayev, M.I.

Inst :

Title : The Productivity of the European Euonymus (Spindle Tree) on Open Plantations, in Forest Cultures and Under the Forest Canopy.

Orig Pub: Lesn. zh-vo, 1957, No 10, 48-49.

Abstract: Surveys of the euonymus (spindle tree) cultures in a series of leskhозes in the Krasnodarskiy Kray showed that euonymus is distinguished by high productivity in the steppe zone on rich soils. The experimental data refute the opinion of some producers that on open plantations, euonymus has a

Card : 1/3

PENKOVASHEV, I.S.; VOZNESENISKIY, S.A. [deceased]

Solubility of inorganic salts in organic solvents and their
mixtures with water. Izv.vys.ucheb.zav.; khim.i khim.tekh. 2
no.6:827-833 '59. (MIRA 13:4)

1. Ural'skiy politekhnicheskiy institut. Kafedra radiokhimii.
(Salts) (Solubility)

PEKHTEREV, A.G.; BAKALEYNIKOV, B.S.

Thyroid gland function of workers in sulfuric acid production.
(MIRA 14:6)
Vrach. delo no.4:114-115 Ap '61.

1. Kafedra rentgenologii i radiologii (zav. - dotsent B.Z.Sukhorukov)
Vinnitskogo meditsinskogo instituta.
(THYROID GLAND) (SULFUR DIOXIDE)

~~PENITREV. A.G.~~

Technique and evaluation of Val'dman's cupping test. Vrach.delo
(MIRA 11:3)
no.1:39-41 Ja '58.

1. Kafedra propedavtiki vnutrennikh bolezney (nauchnyy rukovoditel'-
dots. N.A.Aushev) Vinnitskogo meditsinskogo instituta.
(BLOOD--EXAMINATION) (RHEUMATIC FEVER)

PNIKTEROV, A.G.

Vascular "stars" in cirrhosis of the liver. Vrach.delo no.11:
1209-1211 N '56. (MLRA 10:3)

1. Kafedra propovedticheskoy terapii (zaveduyushchiy - dotsent
N.A.Aushev) Vinnitskogo meditsinskogo instituta.
(LIVER--CIRRHOSIS) (ANGIOMA)

PEKHTEREV, A.G.

Use of lutidine in experimental tuberculosis in guinea-pigs. Vrach.
(MIRA 15:2)
deleno no.1:91-98 Ja '62.

1. Vinnitskiy meditsinskiy institut (nauchnyy rukovoditel' raboty -
zasluzhemnyy deyatel' nauki, prof. M.K.Dal'.
(LUTIDINE) (TUBERCULOSIS)

PEKHTEREV, F.

Volgo-Donskoi put' i leza Urala. [The Volga-Don Waterway and the Ural Lumber].
(Khoz-vo Urala, Sverdlovsk, 1929, no. 1, p. 88-98). DLC: HC337.U9A15

SO: SOVIET TRANSPORTATION AND COMMUNICATIONS, A BIBLIOGRAPHY, Library of Congress
Reference Department, Washington, 1952, Unclassified.

PROKOF'YEV, V.V.; AFARAS'YEV, A.F.; PEKHTEREV, N.P.; ASEYEV, V.I.,
retsenzent

[Descriptive geometry] Nachertatel'naia geometriia. Mo-
shva, Mosk. khimiko-tehnolog. in-t im. D.I.Mendeleeva,
1963. 169 p. (MIRA 17:5)

"APPROVED FOR RELEASE: 06/15/2000

CIA-RDP86-00513R001239830002-3

PEKHTEREV, V.

"Industar M* lenses. Sov.foto 22 no.6:32-33 Je '62.
(MIRA 15:6)
(Lenses, Photographic)

APPROVED FOR RELEASE: 06/15/2000

CIA-RDP86-00513R001239830002-3"

PEKHTEREV, V., konstruktor; DOROZHKO, V., konstruktor

The "Vega-2" camera. Sov.foto 23 no.1,36-37 Ja '63. (MIRA 16:5)
(Cameras)

PEKHTEREV, V., inzh.

Redesigning of "Kiev-Vega" camera. Sov.foto 22 no.4:37 Ap
'62. (MIRA 15:4)
(Cameras)

ATABEKOV, I.G.; NOVIKOV, V.K.; PEKHTEREV, V.V.

Characteristics of the surface denaturation of phytopathogenic
viruses. Vop. virus 8 no.5:600-605 '63 (MIRA 17:1)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut fitopatologii.

CA

A method for adsorbing resinsous substances from conifer needles. G. M. Nadziz and S. I. Pakhrieva (Research Inst. Naukovedatel', Georgian U.S.S.R.); *Gigone i aspartik, i drugie sochineniya vitamina C v Rossii*, p. 53-61 (1943). — The conifer-needle extract (20, 23%) was treated, as far as adsorbents for the vitamin-C-containing resins. Conifer needles were boiled for 15 min. in 5 vol. of water clarified by HCl , let stand for several hours, and filtered through charcoal. Portions of the filtrate were shaken with 4% of the adsorbent for 10 min., and filtered through a Büchner funnel contg. a layer of diatomaceous earth on top of the filter paper. Aspartite gave a turbid, green filtrate tasting almost like the untreated ext. Ostatinized aspartite and gumbein gave clear, transparent, and yellowish green filtrates, almost free from bitter taste. Vitamin C activity of all the filtrates was 20-23% lower than that of the untrated ext. Addn. of 2% by wt. of adsorbent did not give good results.

C. S. Shapiro

ASCE-ELA METALLURGICAL LITERATURE CLASSIFICATION

APPROVED FOR RELEASE: 06/15/2000

CIA-RDP86-00513R001239830002-3"

PEKHTEREVA, S. I.

USSR/Medicine - Tumors
Medicine - Albumin

Jul/Aug 48

"The Adenosinetriphosphatase Activity of Albumin in Malignant Tumors," I. I. Ivanov, B. S. Kasavina, and S. I. Pekhtereva, Lab for Biochem of Cancer, Acad Med Sci USSR, Moscow, 4¹ pp

"Biokhimiya" Vol XIII, No 4

Insoluble fractions of albumin from malignant neoplasms (from rats and rabbits) do not lose subject activity during repeated precipitation test at pH 6.2-8.0. Assumes that activity depends on some active groups, which lend albumin ferment character, rather than a particular phosphatase. Decomposition of adenosinetriphosphate (I) by structural albumins of malignant neoplasms in 0.6 M solution of KCl is not accompanied by an alteration in viscosity or colloidal state. Confirms that albumin extracted from malignant neoplasms detach two phosphate groups from I. Submitted 13 Nov 47.

PA 12/49T79

115

CA

Mechanism of the inactivation of glycolysis by protein extracts from cancer tissues. I. I. Ivanov, S. I. Arkhitekton, and N. O. Zatel'shikova (Acad. Med. Sci., U.S.S.R.) *Biofizika* 14, 501-10 (1949). The inability of ext. from cancer tissues to ferment sugars and glycogen to form lactic acid had been ascribed to destruction of cozymase in the tissues by the special enzyme nucleosidase (Boyland, Boyland, and Greville, *C.A.* 31, 4719). However, cozymase is present in the cancer tissue exts. in an inactive form, apparently combined with a protein. On boiling the cancer tissue exts., free cozymase is liberated. Unboiled cancer tissue exts. retard the glycolytic activity of muscle juice, since the cancer protein combines with the muscle cozymase and inactivates it. Cozymase added to cancer tissue exts. is not destroyed. H. Priestley

PEKHTEREEVA, S. I.

USSR/Chemistry - Glycolysis, Coenzyme of
Tumors

Aug 49

"The Mechanism Explaining the Inactivation of the Coenzyme of Glycolysis by Protein Extracts From Malignant Tumors of Man," I. I. Ivanov, S. I. Pekhtereva, M. L. Tsimbler, Lab of Cancer Chem, Acad Sci USSR, 3 3/4 pp

"Dok Ak Nauk SSSR" Vol LXVII, No 6

Established the presence of a particular thermolabile substance combining with the coenzyme in extracts from spontaneous malignant human tumors (cancer of the stomach, mammary gland, caecum). In extracts from benign human tumors (fibroma or cysts) no substance was observed to combine with the coenzyme. Submitted by Acad A. V. Palladin 16 Jun 49.

PA 1/5OTL4

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27380. PEKHTEREVA, S. I., IVANOV, I. I., TSIMBLER, M. L., O mekhanizme inaktivirovaniya
kofermenta glikolizya belkovymi ekstraktami na elokachestvenija opuchole, cheloveka.
Doklady Akad. Nauk SSSR, Novaya seriya, t. LXVIII, No. 6, 1949, 3.1065-68.---
Bibliogr: s. 1068

SO: Letopis' Zhurnal'nykh Statey, Vol. 36, 1949

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ZBANSKIY, B.I.; PEKHTEREVA, S.I.; ZATEYSHCHIKOVA, N.O.

Effect of some amino acids on the development of Ehrlich's cancer in mice. Report No.1: Effect of lysine, arginine, and glutamic acid on the development of Ehrlich's cancer in mice and the amino acid composition of tumor and liver proteins. Vop.med.khim. 3:58-65 '51. (MIRA 11:4)

1. Laboratoriya biokhimii raka AMN SSSR, Moskva.
(CANCER) (AMINO ACIDS)

PEKHTEREVA, S. I.

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in mice. Biul.eksp.bioli med. 37 no.2:65-67 F '54. (MLRA 7:6)

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prof. S.R.Mardashev) I Moskovskogo ordena Lenina meditsinskogo
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(NEOPLASMS, experimental,

*Marlich mouse carcinoma, eff. of phenylurethane on
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(URETHANE, derivatives,

*phenylurethane, eff. on Marlich mouse carcinoma growth)

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(URINE--ANALYSIS AND PATHOLOGY)
(CALCIUM--ANALYSIS)
(MAGNESIUM--ANALYSIS)

PEKHTEREVA, S.I., dots., BROUDE, L.M., prof., red.; YEGOROVA, N.S.,
red.; BIRKENVAL'D, G.V., tekhn. red.

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students of medical schools] Rukovodstvo k prakticheskim zania-
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